



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-7490; Directorate Identifier 2015-NE-40-AD; Amendment 39-18500; AD 2016-09-02]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Turbomeca S.A. Astazou XIV B and H turboshift engines. This AD requires a one-time inspection of the front surface of the 3rd stage turbine for a groove. This AD was prompted by a report of a crack on the 3rd stage turbine wheel. We are issuing this AD to prevent cracks in the 3rd stage turbine wheel, failure of the engine, in-flight shutdown, and loss of control of the helicopter.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15. You

may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-7490.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-7490; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: wego.wang@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in

the Federal Register on February 2, 2016 (81 FR 5395). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

During the overhaul of an ASTAZOU XIV engine, a crack was detected on the front face of the third stage turbine wheel between two balancing lugs. The cause of the crack is probably linked to a geometric singularity, likely caused by the transformation operation aimed at introducing expansion slots between the blades during embodiment of Turbomeca mod AB 173. Although there is only one known case of this type of crack, and although it was detected, the possibility exists that additional parts have the same geometric singularity.

This condition, if not detected and corrected, may lead to failure of a turbine blade and its associated piece of rim, possibly resulting in an uncommanded in-flight shut-down and/or release of high energy debris.

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-7490.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (81 FR 5395, February 2, 2016).

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

Related Service Information under 1 CFR Part 51

Turbomeca S.A. has issued Service Bulletin (SB) No. 283 72 0811, Version A, dated August 25, 2015. The SB describes procedures for inspection of the 3rd stage turbine wheel. This service information is reasonably available because the interested

parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 9 engines installed on helicopters of U.S. registry. We also estimate that it will take about 5 hours per engine to comply with this AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$3,825.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

(1) Is not a “significant regulatory action” under Executive Order 12866,

(2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-09-02 **Turbomeca S.A.:** Amendment 39-18500; Docket No. FAA-2015-7490;

Directorate Identifier 2015-NE-40-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Astazou XIV B and XIV H turboshaft engines with 3rd stage turbine wheel, part number (P/N) 0 265 25 700 0 or P/N 0 265 25 706 0, installed, if the engine incorporates Turbomeca modification AB-173 or AB-208.

(d) Reason

This AD was prompted by a report of a crack on the 3rd stage turbine wheel. We are issuing this AD to prevent cracks in the 3rd stage turbine wheel, failure of the engine, in-flight shutdown, and loss of control of the helicopter.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) At the next piece part exposure of the 3rd stage turbine wheel or within 1,000 engine hours after the effective date of this AD whichever comes first, perform a one-time inspection for a groove on the front surface of the 3rd stage turbine wheel. Use Accomplishment Instructions, paragraph 4.4.2, of Turbomeca S.A. Service Bulletin (SB) No. 283 72 0811, Version A, dated August 25, 2015 to perform the inspection.

(2) If the 3rd stage turbine wheel passes inspection required by paragraph (e)(1) of this AD, no further action is required.

(3) If the 3rd stage turbine wheel fails inspection required by paragraph (e)(1) of this AD, remove the part and replace with a part eligible for installation.

(f) Installation Prohibition

After the effective date of this AD, do not install any 3rd stage turbine wheel, P/N 0 265 25 700 0 or P/N 0 265 25 706 0, unless it was inspected per the Accomplishment Instructions, paragraph 4.4.2, of Turbomeca S.A. SB No. 283 72 0811, Version A, dated August 25, 2015.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(h) Related Information

(1) For more information about this AD, contact Wego Wang, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7134; fax: 781-238-7199; email: wego.wang@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2015-0223, dated November 16, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2015-7490-0001>.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Turbomeca S.A. Service Bulletin No. 283 72 0811, Version A, dated August 25, 2015.

(ii) Reserved.

(3) For Turbomeca S.A. service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; fax: 33 (0)5 59 74 45 15.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on April 21, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2016-10279 Filed: 5/3/2016 8:45 am; Publication Date: 5/4/2016]